

CLAIM AMENDMENTS

This listing of claims will replace all prior versions and listings of claims in the application.

Listing of Claims

1 1. (Currently Amended) A policy server comprising:

2 ~~a~~ a pre-computation module;

3 identifying and explicitly separating a plurality of policy conditions
4 into passive conditions and triggering conditions,

5 classifying conditions of policy types into one triggering condition and
6 at least one passive condition and

7 grouping a plurality of policies having ~~the same~~ an identical triggering
8 condition ~~and that results in an identical~~ policy decision into a policy
9 equivalency class,

10 ~~said pre-computation module~~

11 continuously evaluating said policies based on changes in said passive
12 conditions, and ~~said pre-computation module further~~

13 scheduling a prioritized evaluation based on at least one of demand and
14 and/or resources;

15 ~~b-~~ a scheduler initiating said prioritized policy evaluation for said passive
16 conditions and said triggering conditions,

17 wherein received events satisfying said passive conditions determine policy-
18 managed entity memberships with respect to the policy equivalency class, thereby
19 prioritizing the evaluation of the policy equivalency classes-class based on demand
20 for the policy equivalency class and available resources, and

21 wherein said passive conditions are arranged according to a precedence
22 ranking and when said policy equivalency class is related to one of said triggering
23 conditions, said policy equivalency class takes a higher priority;

24 e- a triggering module monitoring communication network events satisfying
25 the triggering condition that corresponds to said policy equivalency class;

26 d- a policy decision distribution mechanism issuing the policy decision upon
27 detection of the triggering condition corresponding to the policy equivalency class
28 being satisfied, and distributing the policy decision to the policy equivalency class,
29 thereby enforcing policies for member policy-managed entities that are members of
30 said policy equivalent class for policy enforcement; and

31 e- a policy repository for storing the plurality of policies and the policy
32 decision.

1 2. (Original) The policy server claimed in claim 1, the policy server being
2 associated with a network management system providing support of one of policy-
3 based network management, and policy-based service provisioning.

1
2 3. (Canceled)

1 4. (Currently Amended) The policy server claimed in claim 1, wherein the policy
2 repository further comprises;
3 one of a database and a directory.

1 5. (Currently Amended) The policy server claimed in claim 1, wherein the policy
2 repository further comprises;
3 a policy condition management interface providing interaction with one of the
4 policies and policy conditions.

1 6. (Original) The policy server claimed in claim 1, the policy server being
2 further associated with a policy equivalency class repository for storing policy
3 equivalency class specifications.

1 7. (Currently Amended) The policy server claimed in claim 1, further
2 comprising:
3 a policy condition management interface providing interaction with one of the
4 policies and policy conditions.

1 8. (Currently Amended) A method of policy evaluation comprising steps of:
2 ~~a-grouping a plurality of policies having an identical triggering condition~~
3 ~~that results in an identical the same-policy decision into a policy equivalency-class,~~
4 ~~and class;~~
5 ~~identifying and explicitly separating a plurality of policy conditions into~~
6 ~~passive conditions and triggering conditions;~~
7 ~~classifying conditions of the policy equivalency class into equivalency class~~
8 ~~into one triggering condition and at least one passive conditions;~~
9 ~~b-determining policy-managed entity membership with respect to the policy~~
10 ~~equivalency class;~~
11 ~~c-receiving an event satisfying the triggering condition that corresponds to~~
12 ~~said policy equivalency class;~~
13 ~~d-distributing the policy decision corresponding to said triggering condition~~
14 for policy enforcement to policy-managed entity members of the policy equivalency

class, wherein policies of the policy equivalency class resulting in said policy decision are:

~~e—continuously evaluating said policy decision based on changes related to each said at least one passive conditions-condition; and~~

~~f. in addition to said continuous evaluation based on changes related to the at least one passive condition,—scheduling prioritized policy evaluation for policy decisions that correspond to said policy equivalent class related policies based on demands for the said policy equivalent classes and/or class or available resources,~~

~~wherein said passive conditions are arranged according to a precedence ranking and when said policy equivalency class is related to one of said triggering conditions, said policy equivalency class takes a higher priority.~~

9. (Currently Amended) The method as claimed in claim 8, wherein performing ~~policy evaluation based on satisfying the triggering condition, the method further comprises a step of comprising:~~

changing a corresponding policy-managed entity's membership with respect to the policy equivalence class for said triggering condition.

10. (Currently Amended) The method as claimed in claim 8, the method further ~~comprising a step of:~~

monitoring events in a communications network.

11. (Canceled)

12. (Currently Amended) The method as claimed in claim 8, ~~wherein performing policy evaluation based on satisfying the passive condition, the method further comprises a step of comprising:~~

changing a corresponding policy-managed entity's membership with respect to the policy equivalence class for said passive conditions.

13. (Currently Amended) The method as claimed in claim 8, ~~scheduling policy evaluation with respect to the passive condition, the method further comprises a step of comprising:~~

prioritizing passive condition related policy evaluation based on a demand for one of a policy and the policy equivalency class.

14. (Currently Amended) The method as claimed in claim 13, further comprising ~~a step of:~~

determining a demand for the one of the policy and the policy equivalency class based on a previous utilization frequency ~~thereof~~.

1 15. (Currently Amended) The method as claimed in claim 8, further comprising ~~the~~
2 ~~step of:~~
3 specifying a policy condition.

1 16. (Currently Amended) The method as claimed in claim 15, ~~wherein specifying~~
2 ~~the policy condition, the method further comprises a step of comprising:~~
3 designating the policy condition as ~~one of the~~ either one of said triggering
4 conditions or condition and a said passive condition conditions.

1 17. (Currently Amended) The method as claimed in claim 16, ~~wherein specifying~~
2 ~~the triggering condition, the method further comprises a step of comprising:~~
3 specifying one of a time-of-day event, a quality-of-service event, a source
4 available event, a source unavailable event, a broadcast start event, and an
5 information flow available event to be monitored as one of said triggering
6 conditions.

1 18. (Currently Amended) The method as claimed in claim 17, ~~wherein specifying~~
2 ~~the triggering condition the method further comprises a step of comprising:~~
3 logically combining events when identifying said triggering conditions.

1 19. (Currently Amended) The method as claimed in claim 16, wherein specifying
2 ~~the passive condition, the method further comprises a step of comprising:~~

3 specifying one of a prepaid status event, a policy-managed entity on-line
4 event, a policy-managed entity off-line event, a policy-managed entity capability,
5 and a policy-managed entity interest in a service when identifying said passive
6 conditions.